

SAMS

Standard Army Maintenance System

System Description

SAMS automates day-to-day weapon system and sub-component readiness status, maintenance and related repair parts information, and management functions from the tactical direct support (DS)/general support (GS) level maintenance activities and the non-tactical Installation/Table of Distribution and Allowances (I/TDA) activities to MACOM/theater maintenance program operations.

SAMS-I/TDA is the non-tactical installation-based application that provides standard automated maintenance and repair parts operations management information to installation/TDA DS/GS level repair facilities performing dedicated/area support missions.

SAMS-REHOST consists of both SAMS I&2 applications and supports Combat Services Support (CSS) Table of Organization and Equipment (TO&E) DS/GS maintenance shop production activities and is considered a mission critical system. It provides consolidated maintenance and repair parts data to Forward Support Battalions (FSB), Main Support Battalions (MSB), Aviation Intermediate Maintenance (AVIM) Battalions, Separate Battalions and Brigades, and Materiel Management Centers (MMC).

Software/Hardware Platform

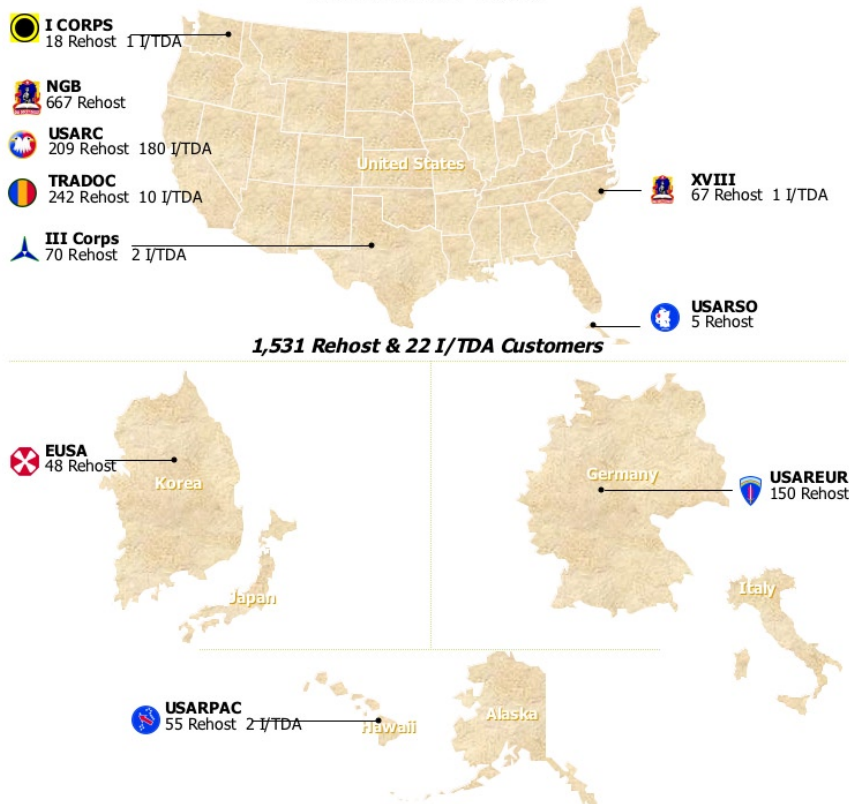
Software

SAMS-I/TDA is programmed in the Ada programming language and uses Structured Query Language (SQL) to access the ORACLE Relational Database Management System (RDBMS). ORACLE is used as it provides FIPS 127 compliant Ada/SQL binding through a proven SQL module compiler. The SAMS-I and 2 TACCS application software was ported to run on a nondevelopmental item (NDI) platform under Windows NT. Its basic functionality has remained unchanged except for Y2K considerations and performs in the Virtual DOS element of the NT Operating System.

Hardware

SAMS-I/TDA operates on HP 9000 (712-715 & 725) & B-2000 minicomputers, standard hardware platforms that comply with Open Systems Environment (OSE) standards and provides interfaces for vertical/horizontal data flows with other Standard Army Management Information Systems (STAMIS). This configuration provides standardized services, interfaces, protocols, and formats as required by the government's OSE requirements. The SAMS-REHOST tactical hardware platform, which replaced the TACCS, is an Army Technical Architecture (ATA) compliant NDI computer.

SAMS User Base



Telecommunications

All SAMS operating levels are designed to use the Blocked Asynchronous Transmission (BLAST) communications software and File Transfer Protocol (FTP). SAMS-I/TDA will utilize existing sustaining base assets such as dial-up telephones, Defense Data Network (DDN) for long haul communications, Local Area Network (LAN), and magnetic media transfer. SAMS-REHOST tactical communications will be supported by Mobile Subscriber Equipment (MSE) and Tri-Service Tactical Communications System (TRI-TAC), with magnetic media as a secondary means of communications.

Security

SAMS processes sensitive but unclassified data in the System High mode of operation.

Benefits

SAMS-I/TDA provides the Army with a responsive and integrated maintenance and related supply management capability not present in previous existing/command unique installation level systems. It provides a value-added focus by integrating supply and maintenance functions, providing automated interfaces with other STAMIS, introducing Automated Information Technology (AIT) benefits, providing immediate error detection, and resolution and faster flow of correct shared data. It also allows customers to extract and manipulate maintenance data using ad hoc query capabilities. Currently installations employ approximately 15 command unique systems. SAMS-I/TDA replaced those uniques at 22 installations before entering moratorium. SAMS-Rehost replaced SAMS-I and SAMS-2 TACCS boxes in tactical units Army-wide. Benefits for both systems include cost-savings, cost avoidance, productivity improvements, operational improvements, and other non-quantifiable benefits.

- a. Productivity improvements include partial savings in personnel time which can be redirected toward other tasks. Productivity improvements are demonstrated for both indirect and direct labor personnel and indirect/direct labor ratios should show a marked improvement. Indirect labor hours in production and control are reduced in the daily processing (status, scheduling, and tracking) of work orders and in preparing periodic and variable requests for management reports. Indirect labor hours in shop supply are reduced in researching information for parts requests. In the warehouse, indirect labor hours

required for inventory control and receipt of parts are reduced with the incorporation of barcode reading. In the shops, indirect labor associated with preparing reports, checking supply status, tracking daily labor, and controlling bench stock is reduced with the automated functions of SAMS. Direct labor (mechanic) time is reduced on nonproductive tasks to include researching of additional parts information, checking supply status, and manually recording time and materials expended per work order.

- b. Operational improvements are demonstrated in the reduction of work order cycle time of approximately one half day by eliminating or improving paper processing time. This ultimately impacts on readiness by shortening the repair cycle time. Productivity improvements can be translated into capacity enhancements by directing the hours saved from both indirect and direct personnel toward processing an increased level of work orders.
- c. Other non-quantifiable improvements include improved work scheduling and tracking; improved cost control of dollars spent for repairs (both labor and materials); improved consistency of data resulting from the use of bar code technology and fewer repeated data entries; expanded reporting capability; greater management control, less time to generate information, reduced cost of "not doing" such as warranty management; and standardization of data elements providing interface with other systems.

Fielding Status

SAMS-REHOST currently operates at over 1400 sites throughout the Army, Army Reserves and Army National Guard. Fielding was completed in 4QFY99.

SAMS-I/TDA entered moratorium in 4QFY98.

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